CLAIMS

What is claimed:

1. A socket comprising:

socket body having a socket holding formation and a plurality of horizontally spaced socket openings therein;

first and second electrically disconnected conductors carried by the socket body;

a plurality of interconnection elements;

at least a first protrusion on a side surface of each interconnection element, each interconnection element being inserted into a respective socket opening with the respective protrusion on the respective interconnection element frictionally contacting a surface of the respective opening,

a first and second set of interconnection elements being electrically connected to the first and second conductors respectively;

lower socket contacts, electrically connected to the interconnection elements, on a lower side of the socket body; and

upper socket contacts, electrically connected to the interconnection elements, in the formation on an upper side of the socket body, the first protrusion on selected interconnection elements of the first set being at substantially the same height as the first protrusion on selected interconnection elements of the second set.

2. The socket as in claim 1, wherein the socket holding formation is formed by recess and sidewalls.

3. The socket as in claim 2, further comprising a plurality of springs held in the recess of the socket, each upper socket contact being on a respective spring.

4. The socket as in claim 3, wherein a means for retaining a microelectronic package deforming the springs against the spring force once inserted.

5. The socket as in claim 1, the first electrically disconnected conductor includes a power plane and liners in one of the socket openings of the first set.

6. The socket as in claim 5, the second electrically disconnected conductor includes a ground plane and liners in one of the socket openings of the second set.

7. The socket as in claim 6, further comprising of an insulation layer at a different elevation than the power and ground planes.

8. The socket as in claim 7, further comprising a signal interconnection element, and a third plane, other than the power and ground plane, connected to the signal interconnection element, electrically isolated from the power and ground planes, conducting signal.

9. The socket as in claim 1, further comprising a stop component at a base of each interconnection element to limit the distance that the respective interconnection element is inserted into the socket opening.

10. The socket as in claim 9, wherein the distance between the stop component and the protrusion is substantially the same height on each interconnection element of the first and second sets of interconnection elements.

11. The socket as in claim 1, comprising a second protrusion on the selected interconnection element of the first set and a second protrusion on the selected interconnection element of the second set.

12. The socket as in claim 11, where the second protrusions are at substantially the same height.

13. The socket as in claim 12, wherein the protrusions of the select interconnection element of the first set are electrically disconnected from the plurality of protrusions on the second set.

14. The socket as in claim 1, further comprising solder balls each attached to a respective interconnection element, each having a lower surface forming a respective one of the lower socket contact.

15. A method of constructing a socket for a microelectronic component, comprising:

inserting a plurality of interconnection elements into respective socket openings of a socket body, a protrusion on each interconnection element frictionally contacting the openings, the protrusions on a first set of the interconnections element contacting a power conductor and the protrusions on a second set of the interconnection elements contacting a ground conductor and being at the same height as the protrusions of the first set.

16. The method as in claim 15, further comprising, a second protrusion at substantially the same height on first and second sets of interconnection elements, being inserted into the socket openings contacting power and ground planes respectively.

17. The method as in claim 16, wherein the interconnection elements are identical.

18. An electronic assembly, comprising:

a carrier including a carrier substrate and upper carrier contacts formed on the carrier substrate;

a socket including a socket body having a socket holding formation and a plurality of horizontally spaced socket openings there in; first and second electrically disconnected conductors carried by the socket body; a plurality of interconnection elements; at least one protrusion on a side surface of each interconnection element, each interconnection element being inserted into a respective socket opening with the respective protrusion on the respective interconnection element frictionally contacting

a surface of the respective opening, a first set of the interconnection elements being electrically connected to the first conductor and electrically disconnected from the second conductor, and a second set of the interconnection elements being electrically connected to the second conductor and electrically disconnected from the first conductor, lower socket contacts electrically connected to the interconnection elements on a lower side of the socket body, each contacting a respective upper carrier contact, and upper socket contacts electrically connected to the interconnection elements in the formation on an upper side of the socket body, the protrusion on one of the interconnection elements of the first set being at the substantially the same height as the protrusion on one of the interconnection elements of the second set;

a microelectronic package, including a package body held by the socket holding formation, a microelectronic circuit held by the package body, and package terminals formed on a lower side of the body and connected to the microelectronic, each package terminal contacting a respective one of the upper socket contacts.